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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,964	12/31/2001	Zhen Zhen	270/237	2116
34055	7590	03/23/2004	EXAMINER	
PERKINS COIE LLP POST OFFICE BOX 1208 SEATTLE, WA 98111-1208			VARGOT, MATHIEU D	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,964

Applicant(s)

ZHEN ET AL.

Examiner

Mathieu D. Vargot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/12/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. Claims 9, 18, 20, 25, 36, 45 and 48-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 9, 18, 25, 36 and 45, the recitation "0-30%" is indefinite in that the independent claims call for the materials to have at least one dopant and the inclusion of zero in the range of the dependent claims would indicate that no dopant need be present. Claim 20 contains the trademark/trade name Teflon. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe the protective layer material and, accordingly, the identification/description is indefinite. Claims 48-50 are indefinite in that the scope thereof cannot be readily ascertained (ie, a process of a certain Example) and these omnibus claims should be cancelled.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 21-25, 28-36 and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al (see Figure 5; col. 4, lines 36-57; col. 7, lines 8-21 and 46-51; Embodiments 5 and 6).

Koike et al discloses the basic claimed process of fabricating an optical fiber of graded refractive index which continuously decreases from the center to the outer periphery (col. 7, lines 8-21) of the fiber by preparing at least three materials and spinning these, at least two of them containing a dopant (see Embodiment 5), the dopants diffusing between the adjacent layers of fiber materials. The resultant perform is subsequently drawn onto a winder roll—see Figure 5. At best, the applied reference fails to explicitly disclose that all the materials used to make the layers contain a dopant in Embodiment 5. However, Embodiment 6 discloses that all extruded layers would have a dopant contained therein and column 7, lines 46-51 teaches that the exact refractive indices of the materials can be controlled by choosing the polymer and/or dopant. Hence, although Koike et al shows the formation of a continuously decreasing refractive index fiber when not necessarily employing a dopant in the outer material portion (ie, that fed to cylinder 9 in Fig. 5), it is submitted that one of ordinary skill in the art would have found it obvious to include a dopant in all the layers as instantly claimed dependent on the exact refractive index profile desired. Certainly, given the disclosure of Koike et al, the selection of appropriate polymers and dopants for each layer would have been well within the skill level of the art. Koike et al discloses the instant polymers, dopants, spinning temperatures and diffusion within the nozzle. The winding is submitted to

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either inherently include a drawing step or render same obvious. Note that drawing an optical fiber perform down to a final fiber desired diameter is nothing but conventional in the art and would certainly have been an obvious modification to the process of Koike et al to form the final fiber with desired properties.

3. Claims 19, 20, 26, 27, 37, 38 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al in view of Schneider et al (see col. 3, lines 22-35). Koike et al is applied for reasons of record as set forth in paragraph 2, supra, the primary reference failing to disclose the aspect of providing a protective layer. As shown in Schneider et al, this is well known in the art as are the instant materials for the covering. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the method of the primary reference as taught by Schneider et al to provide a strengthened optical fiber.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni, can be reached on 571 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot
March 16, 2004


Mathieu D. Vargot
Primary Examiner
Art Unit 1732

3/16/04